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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,703

12/12/2003

Jamshid Mahdavi

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EXAMINER

PATEL, JATIN K

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,703

Applicant(s)

MAHDAVI, JAMSHID

Examiner

Jatin K. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 15-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892) ~
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/12/03, 7/5/2007 ~
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claim 1-14, Group I, in the reply filed on 7/5/2007 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hadi salim (US 6535482 08/18/2003) in view of Tobagi (US 2002/0080721 Filing Date 04/11/2001).

Regarding claim 1, Hadi Salim teaches about delaying the sending of an acknowledgement to sender for an elapsed period in order to achieve the desired

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transmission rate, wherein sender transmit subsequent network packet upon receipt of acknowledgement (fig 3, 8, and column 6, line 44-55).

Hadi Salim does not teach about receiving a network packet from a sender over network and identifying a desired transmission rate for the sender.

Tobagi teaches about receiving a network packet from a sender over network (fig 1); identifying a desired transmission rate for the sender (paragraph 22,23).

It would have been obvious one of ordinary skills in the art at the time of invention was made to combine Tobagi and Hadi Salim to gain flow packets from source can be controlled more accurately to maintain high throughput with reduce probability of congestion (Hadi salim, column 2, line 59-63).

Regarding claim 2, combination of Tobagi and Hadi salim teaches most of limitation as applied to claim 1 above. Hadi Salim further teaches to receiving network packet in first queue associated with IP application (fig 1, column 5, line 57-65).

Regarding claim 3, combination of Tobagi and Hadi salim teaches most of limitation as applied to claim 2 above. Hadi Salim further teaches about forwarding network packet to TCP application after elapsed period of time has passed and wherein acknowledgement is sent from TCP to sender upon receipt of network packet (fig 3, column 6, line 22-35).

Regarding claim 4, combination of Tobagi and Hadi salim teaches most of limitation as applied to claim 1 above. Hadi Salim further teaches to modifying a header of acknowledgement that is sent to sender which instructs sender to slow

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transmission rates down for subsequent network packet sent (column 2, line 26-31, and fig 3, line 38-44).

Regarding claim 5, combination of Tobagi and Hadi salim teaches most of limitation as applied to claim 4 above. Hadi Salim further teaches to identify single byte missing from network packet which instruct sender to resend missing byte and slow transmission rate down for subsequent network packet (column 8, line 35-45, and fig 6).

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hadi salim (US 6535482 08/18/2003) in view of Tobagi (US 2002/0080721 Filing Date 04/11/2001) and further in view of Mangin (US 2001/0017844 08/30/2001).

Regarding claims 6-7, combination of Tobagi and Hadi salim teaches most of limitation as applied to claim 4 and 5 above.

Combination of Tobagi and Hadi salim does not teach about Selective Acknowledgement technique when sending acknowledgement to sender and Explicit Congestion Notification technique when sending acknowledgement. Mangin teaches about Selective Acknowledgement technique when sending acknowledgement to sender and Explicit Congestion Notification technique when sending acknowledgement (paragraph 15).

It would have been obvious one of ordinary skills in the art at the time of invention was made to add SACK and ECN technique from Mangin to combination of Tobagi and Hadi Salim to controlling of TCP connection between sender and receiver (Mangin's paragraph 26).

Claims 8-14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirashrafi (US 5574934 11/12/1996) in view of Tobagi (US 2002/0080721 Filing Date 04/11/2001).

Regarding claims 8-9, Mirashrafi teaches about detecting network transmission occurring with first application and second application (Abstract teaches two or more type of signal data, Audio data is higher priority than video data); decreasing rate at which acknowledgement are sent to second application in order to decrease second application's transmission rate of network packets (column 78, line 40-45); delaying forwarding number of network packets associated with second application from IP to TCP in order to decrease rate (fig 8, fig 2Abstract).

Mirashrafi does not teach to determine from receiving side of first application is a higher priority than the second application.

Tobagi teaches to determine first application is a higher priority than the second application (paragraph 23, receiver attempts to achieve transmission rate).

It would have been obvious one of ordinary skills in the art at the time of invention was made to combine Mirashrafi and Tobagi to allows transfer of large data files in the background with controlled effects on the network traffic (paragraph 24).

Regarding claims 10-12, combination of Tobagi and Mirashrafi teaches most of limitation as applied to claim 8 above. Mirashrafi further teaches assigning

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priorities to first and second application automatically based on communication port by first and second application (column 79, line 27-31); instructing second application via headers associated with acknowledgement to decrease second applicant's transmission rate (column 78, line 25-45).

Regarding claims 13-14, combination of Tobagi and Mirashrafi teaches most of limitation as applied to claim 8 above. Mirashrafi further teaches first and second application via TCP/IP (column 7, line 20); intentionally not sending a needed one of the acknowledgements for second application, which cause second application resend number of network packets and decrease second application transmission rate (column 78, line 13-39).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Rege (US 5361372) disclosed regarding Memory Management for Data Transmission Networks

*Barzilai (US 5063562) disclosed regarding Flow Control for High Speed Networks

*Elbourne (US 2003/0156588 Filing Date 04/11/2002) disclosed method and apparatus for multiple qualities of service to different network connection

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jatin K. Patel whose telephone number is 571-270-1839. The examiner can normally be reached on 8-5 Mon-Fri Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on 571-272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP

A handwritten signature in black ink, appearing to read "Jatin K. Patel", is located in the bottom right corner of the page.